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REMARKS

By way of this amendment, claim 1 is amended and new claims 8-19 are presented. Claims 1-4 and 6-19 are pending in this application. Applicant respectfully requests reconsideration and allowance of the present application.

In the latest Office Action, claims 1-4, 6 and 7 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,263,380 to Riedl. For the reasons discussed herein, Applicant submits that claims 1-4, 6 and 7 are not anticipated by Riedl.

The claimed invention as recited in independent claim 1, as amended, is directed to an electrochemical cell comprising a container having an open end and a side wall, positive and negative electrodes and an alkaline electrolyte solution disposed in the container, and a cover disposed on the open end of the container and having a peripheral wall extending radially outside of the side wall of the container. The electrochemical cell also comprises a seal and an adhesive disposed between the side wall of the container and the peripheral wall of the cover. The adhesive adheres the cover to the container. The seal is closer to the open end of the container than the adhesive. Neither the cover's peripheral wall nor the container's open end are crimped, thereby forming an adhesively secured, non-crimped electrochemical cell. Independent claim 3 recites an electrochemical cell that includes a cover disposed on the open end of the container and a first adhesive disposed between the cover and the container and a second adhesive disposed between the cover and the container wherein neither the cover nor the container's open end are crimped thereby forming an adhesively secured, non-crimped electrochemical cell.

Applicant's invention is directed to an adhesively secured non-crimped electrochemical cell in which the cover is adhered to the container via the adhesive such that neither the cover's peripheral wall nor the container's open end are crimped. It should be appreciated that by eliminating the need for a crimped closure, the electrochemical cell 10 advantageously allows for the cathode 22 and anode 26 to extend closer to the open end of steel can 12, and therefore offers greater available internal height for active electrochemical materials. Thus, elimination of the crimped closure pursuant to the present invention offers significant advantages.

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The Riedl patent discloses a button cell (see FIGS. 1-5) having a cell housing (cup) 1 and cell cover 2 containing negative electrode 6, positive electrode 7, separator 8, and a swelling sheet 9, as well as alkaline electrolyte. Disposed between cup 1 and cover 2 is a conventional seal 3. The open end of cup 1 is crimped inward to compress seal 3 and thereby form a sealed closure between cover 2 and cup 1. The button cell of Riedl further includes a contact cap 4 drawn over the cell, and a sealing material (51, 52) disposed between cap 4 and outside surface of cell cup 1.

In the Office Action mailed June 13, 2005, the Examiner stated that Riedl discloses a cover 4 disposed on the open end of the container. First, Applicant notes that cap 4 of Riedl is drawn over the cell, specifically over the top of the cover 2 that is already sealed against cap 1. In Riedl, the cover 2 is disposed on the open end of the cup 1 and the open end of the cup 1 is crimped inward towards cover 2 to compress seal 3. It is the cover 2, not the cap 4, in Riedl that closes the open end of the container 1, and thus the cap 4 does not serve as the cover.

Moreover, the Examiner stated that neither the peripheral wall of the cover 4 nor the open end of the container 1 is crimped in Riedl, and that Riedl discloses a non-crimped alkaline electrochemical cell. Applicant notes that both independent claims 1 and 3 recite that neither the cover's peripheral wall nor the container's open end are crimped, thereby forming an adhesively secured, non-crimped electrochemical cell. The container (cell cup) 1 in Riedl is clearly crimped at its open end so as to pinch the conventional seal 3 inward towards cover 2 to form a sealed closure of the button cell. As a consequence, the container's (cell cup's) open end in Riedl is clearly crimped to form the sealed closure. Thus, the Riedl button cell is a crimped electrochemical cell.

Finally, the Examiner stated that Applicant's own disclosure in FIG. 1 shows that cover 30 which is cup-shaped having bent edges is placed in a sealing arrangement with the cover and is identical to the arrangement of Riedl. Contrarily, Riedl is clearly formed with a crimped closure, whereas Applicant's container and cover are formed such that the cover is assembled onto the container and adhered together without any crimping. Accordingly, Riedl fails to teach or suggest a non-crimped electrochemical cell as recited in Applicant's

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independent claims 1 and 3 and the claims dependent thereon, and the rejection of the claims should be withdrawn.

By way of this amendment, Applicant has amended claim 1 to further recite that the electrochemical cell comprises a seal disposed between the side walls of the container and the peripheral wall of the cover, and the seal is closer to the open end of the container than the adhesive. Riedl fails to teach an adhesively secured, non-crimped electrochemical cell having a seal, and an adhesive disposed between the side wall of the container and a peripheral wall of the cover as recited in claim 1, as amended. Also, Riedl fails to teach an adhesively secured, non-crimped electrochemical cell having first and second adhesives as recited in independent claim 3. Accordingly, Applicant submits that Riedl fails to teach each and every limitation of Applicant's claimed invention as set forth in independent claims 1 and 3, and those claims dependent thereon. Accordingly, Applicant requests that the rejection of the claims be withdrawn and that the claims, as amended, be allowed.

Applicant has added new claims 8-19. New independent claim 10 recites an electrochemical cell having first and second sealing materials disposed between the cover and the container to form an adhesively secured electrochemical cell. The Riedl reference fails to teach or suggest an adhesively secured electrochemical cell having first and second sealing materials as recited in the new claims. Accordingly, Applicant respectfully requests that new claims 8-19 likewise be allowable, which action is respectfully solicited.

Finally, Applicant is submitting herewith a Supplemental Information Disclosure Statement disclosing references cited in a related application, which the Examiner has already considered. Applicant is submitting these references so that the information will be printed on any resulting patent that issues.


By way of the foregoing discussion, Applicant has demonstrated that the claims are not anticipated by Riedl, and the rejection of claims 1-4, 6 and 7 under 35 U.S.C. §102(b) should therefore be withdrawn.

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In view of the above remarks, it is submitted that claims 1-4 and 6-19 define patentable subject matter and are in condition for allowance, which action is respectfully solicited. If the Examiner has any questions regarding the patentability of any of the claims, the Examiner is encouraged to contact Applicant's undersigned attorney at his convenience.

Respectfully submitted,

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Date


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